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Abstract. *Dinonigidius bartolozzii* Paulsen, **new species**, (Coleoptera: Lucanidae) is described from Sri Lanka, and compared with the only other species of the genus, *D. ahenobarbus* de Lisle from India.

Introduction

Melchior O. de Lisle (1974) created the genus *Dinonigidius* (Coleoptera: Lucanidae: Lucaninae) for his new species, *D. ahenobarbus*. This moderately large species (24–29 mm) is distributed in the Palni Hills (type locality) and Anamalai Hills, Tamil Nadu, India. Males are distinctive in possessing a large, emarginate process on the pronotum. Very few specimens are known to exist in collections.

Bartolozzi and Bomans (1988) provided an excellent treatment of the stag beetle fauna of Sri Lanka, but did not discuss the presence of *Dinonigidius*. Based on label data, specimens of *Dinonigidius* began to be collected in Sri Lanka shortly after that publication. These Sri Lankan specimens were treated as *D. ahenobarbus* by all subsequent authors (Bomans 1994; Mizunuma and Nagai 1994; Mizunuma 2000; Fujita 2010), but based on clear morphological differences, not the least of which is the lack of a pronotal process in males, they belong to a second, undescribed species. The impediments to recognition of the species' distinctness have been that few specimens of the true *D. ahenobarbus* exist in collections and that the holotype of *D. ahenobarbus* (MHNG) and many Sri Lankan specimens (NHM) have been on a delinquent loan for more than a decade and so have been unavailable for study for many years. Despite this, comparison of the Sri Lankan material with the available Indian specimens and the detailed original description and illustration of the holotype by de Lisle indicates unequivocally that two species are present. The Sri Lankan species is therefore described here as new.

Materials and Methods

Specimens and Taxonomic Material. The following institutions and private collections provided specimens examined for this study. A total of 29 *Dinonigidius* specimens formed the basis of this research.

CASC California Academy of Sciences, San Francisco, CA, USA (J. Schweikert)
EPGC Everardo & Paschoal Grossi Collection, Nova Friburgo, Brazil
FMNH Field Museum of Natural History, Chicago, IL, USA (J. Boone)
FSCA Florida State Collection of Arthropods, Gainesville, FL, USA (P. Skelley)
GBC Guy Bruyea Collection, Hemet, CA, USA
LBC Luca Bartolozzi Collection, Florence, Italy
MHNG Muséum d'Histoire Naturelle, Geneva, Switzerland (G. Cuccodoro)
MJPC M. J. Paulsen Collection, Lincoln, NE, USA
MZUF Museo di Storia Naturale, Zoologia- "La Specola", University of Florence, Italy
NHM The Natural History Museum, London, UK (M. Barclay, B. Garner, M. Kerley)
TFC Takaaki Fujii collection, Kobe, Japan

Taxonomic Treatment

***Dinonigidius bartolozzii* Paulsen, new species**

Materials Examined. Holotype male, deposited at MZUF, labeled: a) "SRI LANKA / Kandy, 1.I.1990 / Rautenstrauch leg."; b) on red paper, "*Dinonigidius* / *bartolozzii* / [male symbol] Paulsen / HOLOTYPE". Paratypes (3 male, 1 female; LBC) labeled: a) as holotype. Paratypes (5 male, 3 female; NHM, LBC, PGC, GBC) labeled: a) "SRI LANKA / Kandy / 1.I.1990 leg. / Rautenstrauch"; NHM specimens with additional handwritten labels "12954-a", "12954-b", "17540a", and "17540b". Paratype female (PGC) labeled: a) "SRI LANKA / Kandy / 1.I.1990". Paratype male (MJPC) labeled: a) "SRI LANKA / Kandy / 12.I.2001". Paratype female (MJPC) labeled: a) "SRI LANKA / Kandy / 12.I.2001"; b) on orange paper "DNA VOUCHER / P466 2014 / MJ Paulsen – UNSM". Paratypes (1 male, 1 female; MJPC) labeled: a) "SRI LANKA / II.1995". Paratypes (3 male, 2 female; NHM, MJPC) labeled: a) Sri Lanka / Kandy / 5.1994 / leg. A. Maier"; NHM specimens with additional handwritten labels "18129-a", "18129-b", and "18129-c". Paratype male (FSCA) labeled: a) "SRI LANKA / Kandy / January 1999". Paratype male (MJPC) labeled: a) "SRI LANKA / Central Province / Kandy District / February 1995". Paratype male (TFC) with handwritten label: a) "Kandy / Sri Lanka / 14.05.94". All paratypes with paratype label, on yellow paper: "*Dinonigidius* / *bartolozzii* / [male or female symbol] Paulsen / PARATYPE.

Description, holotype (Fig. 1). Coleoptera: Scarabaeoidea: Lucanidae. *Length:* 19.0 mm. *Width:* 7.0 mm (elytra). *Color:* Piceous, with clypeus, mandibles, legs, and venter lighter red. *Head:* Surface shiny, punctate, punctures with short setae; punctures coarse and dense (distance between punctures about 1 diameter) on frons, fine and sparse (punctures separated by distinctly more than 1 diameter) on clypeus. Clypeus declivous, narrowing between mandibles to subtruncate apex; apex subdentate medially. Eyes completely divided by ocular canthus; canthus rounded, narrow and uniform in width, reaching temporal process at distinct suture. Temporal process large, projecting posteriorly as a triangular lobe; lobe divided into anterolateral and posterior faces by an impunctate ridge; both faces coarsely, contiguously punctate. Antennal club small, short (shorter than scape), antennomeres 8–10 (club) entirely tomentose. Mandibles (to true apex) shorter than head, apex acute, internally tridentate (right) or quadridentate (left), teeth abraded; dorsal surface produced into long, vertical curved ramus (false apex); ramus with apex obtuse. Mentum broad, three times wider than long, bilobed, surface coarsely but irregularly densely punctate. *Pronotum:* Form short, as wide as elytra, with anterior tumosity but lacking anteriorly bifurcate projection. Anterior angles emarginate. Surface variable, disc sparsely punctate, area laterad of disc with areas of coarse, dense to contiguous punctures. *Elytra:* Form parallel-sided. Surface striate; striae impressed with coarse, oval, almost contiguous punctures; striae distinct on disc, becoming obsolete laterally; interstriae 1–3 with fine (smaller than strial punctures) punctures in 2–3 irregular rows; interstriae 4 and greater with punctures subequal in size to strial punctures, obscuring striae. *Legs:* Protibia with acute apex and with 5 acute teeth decreasing in size proximally. Mesotibiae with 1 large external tooth below middle with 1–2 smaller accessory teeth proximally. Metatibiae with 1 small tooth medially. *Thorax:* Prosternal process behind procoxae strongly pointed. Metasternum entirely punctate, lacking glabrous area anteriorly just behind metacoxae. *Abdomen:* Male genitalia as in (Fig. 2), flagellum asymmetrical and curved at apex, shorter than basal piece and parameres combined; median lobe narrow.

Paratype variation, males. Length: 15.5–21.4 mm. Width: 6.0–7.2 mm. Males with color varying from red (teneral) to almost black.

Paratype variation, females. Length: 14.7–18.6 mm. Width: 5.9–7.2 mm. Females with simple mandibles lacking vertical ramus of male or any vertical development (small dorsal projection at base present in *D. ahenobarbus*); apex acute, internally with 1–2 teeth. Females with anterior pronotal tumosity weakly indicated, lateral contiguously punctate areas subfoveate. Females with temporal process not strongly produced posteriorly, instead narrow, rounded and similar in shape to the canthus.

Etymology. The species is named in honor of my friend and colleague Luca Bartolozzi, Natural History Museum "La Specola", University of Florence, Italy, who provided an excellent treatment of the Sri Lankan stag beetle fauna with H. E. Bomans just before specimens of this species began to be discovered. His knowledge, insights, and generous loans of material have contributed greatly to my research on Lucanidae.

Distribution. Almost all specimens known are from Kandy, Sri Lanka. A photograph of one specimen from Elpitiya in southern Sri Lanka is considered to be referable to *D. bartolozzii,* but the specimen was not physically examined and because it is from a locality distinct from the remainder of the type series it was not included as a paratype.

Remarks. The new species differs from *D. ahenobarbus* (Fig. 3) in the following ways: anterior pronotal process lacking in males; male genitalia with a shorter, asymmetrical flagellum and much narrower median lobe (flagellum longer than parameres + basal piece, median lobe broad in *D. ahenobarbus* (Fig. 4)); prosternal process acute in both sexes, not bluntly rounded; metasternum lacking anterior glabrous area in both sexes; temporal process in males with posterior face distinctly punctate, not glabrous.

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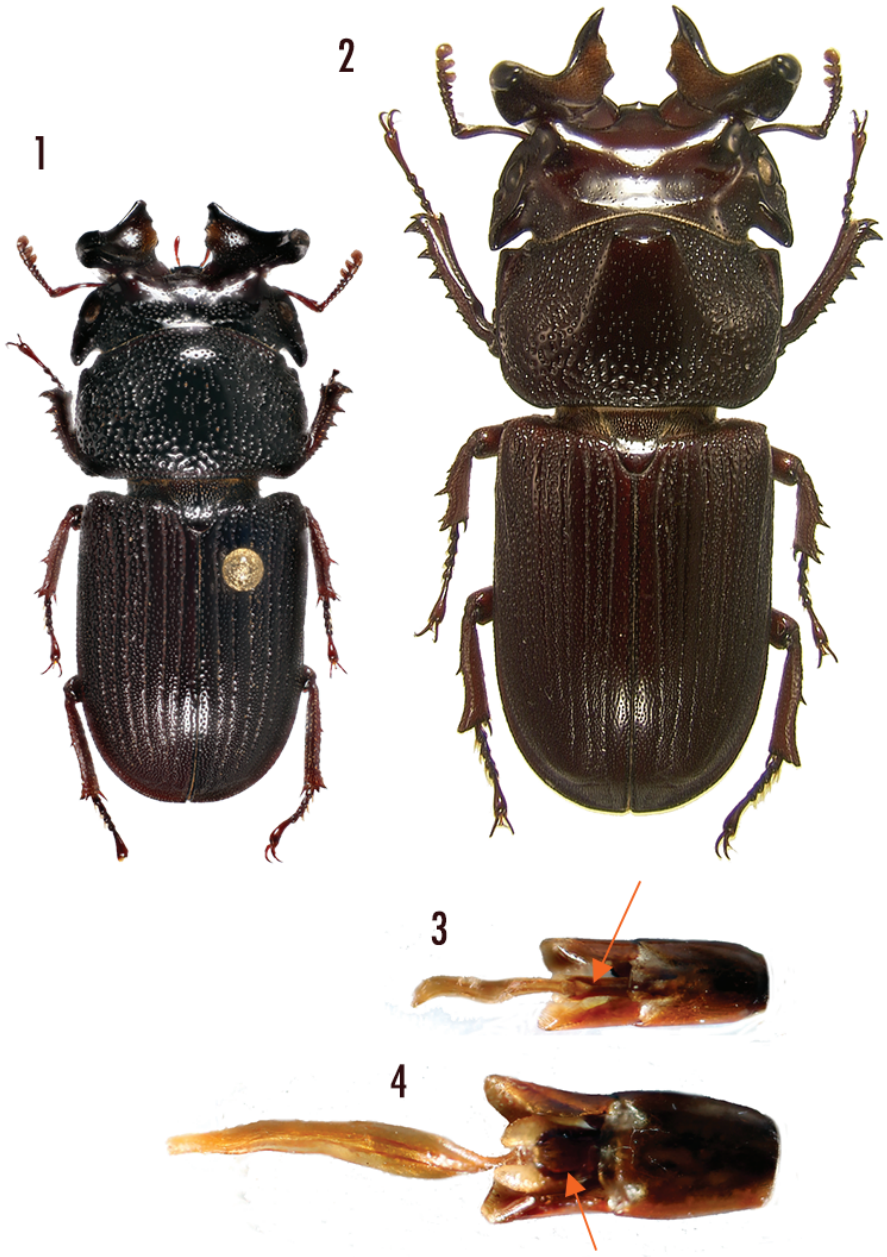

Figures 1–4. Dorsal habitus and male genitalia of *Dinonigidius* species, ventral view. Arrows indicate median lobe. **1, 3)** *D. bartolozzii* Paulsen, n.sp. **2, 4)** *D. ahenobarbus* de Lisle.